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Some Principles of Maximum Production

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OBSTACLES TO MAXIMUM PRODUCTION

ONE day in the summer of 1914, after I had spent the better part of the day with Luther Burbank, roaming around the hills about Santa Rosa, I asked him a very direct question.

I said to him, "Dr. Burbank, of all the hundreds of people who come here during the day and thousands upon thousands who have come here during your lifetime, what is the thing that appeals to you most strikingly as their most prominent positive character?"

He did not have to study very long in answering but replied immediately that the most striking thing was the demand on their part to see a miracle. They all wanted to see a miracle performed. He elucidated it further by saying that plant improvement is one of the simplest things in the world. All that it requires is the crossing of the various species and the selection of the kind of plant that is wanted, and almost any farmer could do it if he would apply himself to it. Simple plant improvement does not even require a great amount of technical knowledge, but everyone who comes to Santa Rosa or goes out to the Sebastapool testing grounds wants to see a miracle, wants to know how it is done, and insists that Dr. Burbank is a wizard, when he claims merely to be an exponent of common sense.

I have taken this as a typical instance in life because it applies so particularly to business. In business, both sides—the employer and the worker—want to see a miracle performed. In my early systematization days I often

used to run across some man who would ask me if I could advise him of any way in which he could keep his workers satisfied. I would, before answering, naturally get a statement of the case and eventually it would come to this—that one or two individuals had been working with him for five or ten years and they were getting a little uneasy and he was afraid they were going to ask for more pay. He wondered if there were any method or system or any principle that he could apply there by which he could keep the worker satisfied and yet not pay him any more money. That was his demand for a miracle. You very often find, on the other side, that an employee figures that he can do considerable loafing and yet get paid. That is his demand for a miracle.

We have seen in Chicago a little incident which took place that, perhaps, shows the day of miracles has arrived. As you know, we had a large influx of emigration from the south during the war. Negroes were brought up from the south, and the southern negro is quite a different type from our northern negro. They were brought up from the south to take the place of men who had been sent to the east to work in munition plants and various other war activities.

A colored woman, talking to another across the fence one day, said, "Ma husband has got a real job. He's got a job at the stock yards and is gettin' fo' dolla's a day."

The other one said, "Why, chile, that ain't no job. Ma man is on one of these here cost plus jobs."

The first speaker asked, "What is a cost plus job?"

"Why," she was told, "that's one of the miracles in business. The less he works the more he gets." Now, that's a miracle, "but," the speaker added, "that ain't all the miracle, 'cause the more the boss spends the more he gets to spend." Now, that is practically the only miracle that I have been able to ferret out in business, and it is something of a question as to how long that is going to continue, but the principle absolutely remains the same—we all want miracles. In religion possibly it is necessary to have a miracle. Certainly in medicine it is necessary, as Dr. Osler said, to have a touch of the miraculous, and in law we constantly see the pressure put upon legislators to induce them to enact a law—that one miracle that is going to change the whole system of life. Just as, for instance, a friend of mine believes if we had the theory of Henry George enacted into law there would be absolutely no quarrels between people of different nationalities.

The second in the list of obstacles in the way of maximum production is the lack of personal contact. This has been treated very ably and is being worked out in a splendid manner. Of course, if we know anyone we are very prone to like him, even if we work for him and he works for us. Today much business, many workers claim, tends neither to know nor to concern itself about the workers, and this attitude is surely limiting output.

The third obstacle in the way of production is one of policy. That has to do with the fact that the worker does not participate directly in the profits that he makes and also that he is not penalized for the errors that he makes. The first part of this question is very thoroughly treated in the vari-

ous texts and needs only to be mentioned here.

The fourth obstacle in the way of maximum production is the lack of science and management. I have always been a great admirer, since reading it, of Quintilian's *Institutes of Oratory*, and learning that it was written amid the sounds of battle practically, and after studying it, I came to a realization that here was a real exposition of a science. It has often occurred to me that among the sounds of business battle there is going to be some Quintilian who will hammer out and give us an outline and methods by which workers may be controlled, or rather by which they may be brought to produce their maximum, both for the benefit of themselves in the first place, and of business secondarily. When we have that we will have a real science of the management of business. At the present time we do not have it.

The fifth obstacle is closely related to the lack I have just mentioned. Today, anyone who can meet a payroll or get a job as foreman or manager is privileged to act as a supervisor of labor, yet he may have no competence whatever aside from his own technical ability; he may not be a manager, in other words. In so many cases workers are kept at work under conditions which, although they are within the law, yet eventually will lead to occupational diseases. That is one of the instances that so often occurs. Then the tendency of the ordinary foreman, as we know, is to get the day's work out and not figure on what is happening to the business or to the state, or what attitude of mind the employee takes as the result of this crowding. It has often been said, and has held true in the past particularly, that about the only requirement necessary in certain kinds of supervision is a good future talk and the ability to

keep the employee believing it. I know of at least one manager of labor who defies any worker to get next to his future talk, as he terms it, inside of five years. He says that he can save from five to ten dollars a week in salary merely by picturing the beautiful desk and the wonderful leather chair that the worker is going to occupy some time when he gets a trifle more expert in the business.

The sixth element in reducing production is the ever lessening physical capability of the worker. Civilization, as we notice so often in connection with biology, is now sending the best young men to be killed by the combined forces of disease, chemistry and machinery, and, of course, the race cannot expect to get very much better under those conditions. Then there is a factor of industrial hazard to be considered. So we have war, industry and the survival of the unfit. These place a constantly growing obstacle in the path of production each year, and this is showing very plainly in an increasing tax list, which is due in part to direct or indirect public welfare work and is showing more markedly in production. When the machine has obtained its maximum, the slump bids fair to become enormous. The greater the stress that is placed upon a machine and its place in business, the greater and more noticeable will be the slump that will come when you attempt to make physical capability a requisite in work.

The seventh, and the last factor that I have listed is the attitude of the worker toward his job. I have noted particularly some of the instances that supervisors and employers have given me and that workers have given me, and in, perhaps, 90 per cent of them it is the attitude of the worker toward his job—his mental slant—that makes either success for the worker or trouble

for the employer. We need a real system of working psychology of industrial control. Business men and psychologists are not quite together yet, but eventually they will be, and when they are, when the one can use what the other produces, there will be an immense increase in production due to that factor alone.

I call to mind particularly an instance of a young man, an American, who took a position with a Chicago industrial concern when he was about seventeen or eighteen years of age. He had been promised an increase of salary of five dollars in about three or four months after he came there, and he did not get it and was about to resign. However, he got excellent counsel. He talked with a man whom he knew and respected. This man advised him to stay close to his work and get in better shape, as the place where the young man was working was known as an excellent training ground. He did so and about a year afterward secured a position with an eastern firm—one that was known to treat its workers very well indeed—at a fine salary.

Some years afterward I met this young man and while visiting with him asked him how things were going.

He said, "Well, you notice I'm still with the old firm, and they are using me right, too."

I said, "You must get a great deal of satisfaction out of a position of that kind."

He said, "I do, but there is one thing that I get more satisfaction out of than anything else in the world. Whenever I go to Chicago I like to go back to the boss's office and look around the place there, and in a certain department that I can see from his desk is a place where there could be a saving of \$2,000 a year made, every year since I was there." He added, "It is a condition peculiar to his business and there

probably could not be the same saving made in other businesses. Now, the great satisfaction," he went on to say, "has come to me because I am penalizing my old employer \$2,000 per year for the \$5.00 a week that he cheated me out of during the year I was working with him."

Now, I have given that instance for this reason; it is the history of one grudge. There is merely one grudge account as it stands, and it is easy to see who is behind; both parties, of course.

Now, when we take over the grudge of other nations through our emigrants, we are only multiplying cases of this kind by a considerable number, and that is one thing that is to be considered in emigration—that we are taking over a kind of harvested hate, where people have been abused in the old country and then are brought over here to work, and they hold those grudges the same as the American boy of whom I wrote. In fact, I have had some students of the question tell me that early abuse, a heredity of abuse, an inheritance of abuse, is what makes an ideal socialist—that if you have that background, there is your perfect basis for socialism or bolshevism.

SOLUTIONS FOR MAXIMUM PRODUCTION PROBLEMS

The demand for the miracle is the one that is going to persist. If there is any answer to it I have not been able to find it, nor have I found any one who has any solution. If there is any other way to secure the good will of the worker other than by treating him rightly, that too has escaped my notice.

Lack of personal contact has been listed as the second factor. That is, the methods that have just been told this morning are identically the ones that will take away the lack of personal contact that has been so prevalent. **The policy that the worker does not**

participate in what he earns or does not share the responsibility of his losses is an ideal text-book question and has been discussed as such.

To help in getting a better science of management of workers it is necessary for some one to do identically with the fugitive matter that is now at hand as has been done with the other sciences. One manager has one good method or system and another another, and by collecting those and arranging them it will be possible to cover the entire field—speaking more from the idea of mentality of the worker—how he is best brought to produce, not so much from a technical side of the question, because the technical men will always take care of that.

This lack of control over our supervisors of labor is one difficulty which I believe will be remedied eventually by making the supervision of labor a profession by licensing the supervisor. At present, it occurs to me that it might well be done by the state and be made self-supporting, somewhat on the plan of the licensing of teachers, this particularly to apply to industries where certain knowledge, as of occupational disease, is necessary.

The sixth obstacle, the ever lessening physical capability of the worker, is one which calls for the best thought of which we are capable. We have some excellent literature on the subject and some valuable occupational disease studies and texts, but it is not broad enough, and most of all, it is not disseminated widely enough and gotten to where that information will do the most good.

Seventh and last is this obstacle which comes from the mental attitude, and that to me is the big thing—the big obstacle of the entire lot. Some work has been done along that line, but it applies more to such arts as bring in money immediately, as life

insurance or salesmanship. A study of the mentality of the worker, that is the all-important thing. Then there is the idea of propagandizing as to the worker. We never see a raid on a bolshevist nest, as they are called, but what we see the expression, "tons of propaganda." That term is invariably used by the reporters, "tons of propaganda"—always tons. It is fair to ask here, has the employer sent out any pounds of propaganda to his men? I always have the picture before me of the office in which these sheets are brought out—men working under adverse conditions, who hardly know whether they can get their radical newspaper next month because of the law and because of the lack of money, yet they are propagandizing. They are getting out "tons" of literature that is going to the workers, and here is an employer having a skilled advertising man, one who understands psychology, with the multigraph right at his hand or the printing press, if necessary, and yet the business is not sending out any pounds of literature to its workers to help clear the situation. I think that if a business has something to advertise it should advertise to the worker first, even before it advertises to the public, because the worker is the first man in the scheme of production. He makes the things.

The one who buys is really the second man. Propagandize or advertise to the worker first.

I must confess that for quite a number of years I believed that the big solution was in system, in method or something of that kind. Later, when I heard a man say that the Golden Rule was the thing and that that was the way to do, I figured out that he did not have any technical vocabulary and that was the reason why he was advocating the Golden Rule, but I have come around to that standpoint myself. I think that the matter of friendship between the employer and the employed excels all systems, methods or psychology that we can present, but I am not underestimating the value of those three factors.

As Governor Frank O. Lowden stated in his comments on the needs of business, in an informal talk before his home folks in Springfield, there is need for humanization in industry. Make business human and the problem of output is automatically taken care of along with the other pressing problems. Kindliness in business is not a sign of weakness; it is the indicant of strength. Mutual consideration is not the evidence of lack of method; it is merely the logical working out of common sense. "Humanity supreme" should be the motto of all industry.